

Listing of the Claims:

1. - 29. (canceled)

30. (previously presented): An inherently antimicrobial composition comprising:

- a. a substrate; and,
- b. a coating, layer, or enhanced surface area on said substrate, consisting essentially of polymeric molecules formed by the polymerization of a diallyldialkylammonium salt wherein said polymeric molecules are non-leachably bound to said substrate, and wherein said coating, layer, or enhanced surface area exhibits antimicrobial activity due to the presence of said polymeric molecules.

31. (previously presented): The composition of claim 30, wherein said diallyldialkylammonium salt is a diallyldimethylammonium salt.

32. (canceled)

33. (canceled)

34. (currently amended): The composition of claim 30, wherein said composition comprises all or part of a wound dressing, a sanitary pad, a tampon, an intrinsically antimicrobial absorbent dressing, a diaper, toilet paper, a sponge, a sanitary wipe, a food preparation surfaces, a gowns, a gloves, a surgical scrubs, a sutures, a needles, a sterile packings, a floor mats, a lamp handle covers, a burn dressings, a gauze rolls, a blood transfer tubing or storage container, a mattress cover, bedding, a sheet, a towel, underwear, a socks, a cotton swabs, an applicators, an exam table covers, a head covers, a cast liners, a splint, a padding, a lab coats, an air filters for an autos, a planes, or an HVAC systems, a military protective garments, a face masks, a devices for protection against biohazards and biological warfare agents, lumber, meat packaging material, or paper currency.

35. (previously presented): The composition of claim 30, wherein said substrate is comprised, in whole or in part, of cellulose, or other naturally-derived polymers.

36. (previously presented): The composition of claim 30 wherein said substrate is comprised, in whole or in part, of synthetic polymers including, but not limited to: polyethylene, polypropylene, nylon, polyester, polyurethane, or silicone.

37. - 43. (canceled)

44. (previously presented): The antimicrobial composition of claim 30, wherein said substrate is a woven or nonwoven flexible matrix, and said composition is formed into the shape of a wound dressing.

45. (previously presented): The antimicrobial composition of claim 30, wherein said composition absorbs aqueous liquids.

46. (previously presented): The antimicrobial composition of claim 30, wherein said substrate is wood, lumber, or an extract comprising or a derivative of wood fiber.

47. - 50. (canceled)

51. (previously presented): An antimicrobial-coated composition for destruction of microbes contacting said composition, comprising:

- a. a substrate onto which a coating of antimicrobial polymers is bonded; and,
- b. said coating, formed of an antimicrobially effective amount of polymeric molecules formed by the polymerization of diallyldimethylammonium chloride, also known as DADMAC, wherein said polymeric molecules are non-leachably and covalently bonded to surface sites of said substrate, and wherein said composition is absorbent of aqueous liquids, whereby said polymeric molecules act to destroy

microbes coming in contact with said polymeric molecules.

52 – 66. (canceled)

67. (previously presented): The composition of claim 30, wherein said polymeric molecules are formed by the polymerization of diallyldimethylammonium chloride, also known as DADMAC.

68. (previously presented): The composition of claim 30, wherein said substrate is a woven fabric.

69. (previously presented): The composition of claim 30, wherein said substrate is a nonwoven.

70 - 71. (canceled)

72. (previously presented): The composition of claim 30, wherein the polymer is a homopolymer.

73. - 85. (canceled)

86. (previously presented): The inherently antimicrobial composition of claim 30, wherein said substrate is a superabsorbent material.

87. (previously presented): The inherently antimicrobial composition of claim 86 wherein the superabsorbent material comprises a flexible substrate.

88. (previously presented): The inherently antimicrobial composition of claim 86 wherein said substrate is comprised, in whole or in part, of cellulose or other naturally-derived polymer.

89. (previously presented): The inherently antimicrobial composition of claim 86 wherein said substrate is comprised, in whole or in part, of a synthetic polymer.

90. (canceled)

91. (previously presented): The inherently antimicrobial composition of claim 86, wherein said diallyldialkylammonium salt is a diallyldimethylammonium salt.

92. (previously presented): The inherently antimicrobial composition of claim 91, wherein said diallyldimethylammonium salt is diallyldimethylammonium chloride, also known as DADMAC.

93. (currently amended): The inherently antimicrobial composition of claim 86, wherein said composition comprises all or part of a wound dressing, a sanitary pad, a tampon, an intrinsically antimicrobial absorbent dressing, a diaper, toilet paper, a sponge, a sanitary wipe, a burn dressings, a gauze rolls, a mattress cover, bedding, a sheet, a towel, underwear, a socks, a cotton swabs, an applicators, an exam table covers, a head covers, a cast liners, a paddings, a lab coats, an air filters for an autos, a planes, or an HVAC systems, a military protective garments, a face masks, a devices for protection against biohazards and biological warfare agents, meat packaging material, or paper currency.

94. (canceled).